

ABSTRACT

THE EFFECT OF CLONES AND MATURITY LEVELS ON THE QUALITY OF CAVENDISH BANANA (*Musa acuminata Cavendish*) DURING STORAGE

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Banana (*Musa sp.*) is a tropical fruit that is highly sought after by consumers in many countries because of its taste, nutrition and relatively affordable price. One type of banana plants that is cultivated is the Cavendish banana (*Musa acuminata C.*). The aims of this research were to determine the effect of Cavendish banana clone on the rate of maturity and quality of the fruit during storage and to determine the effect of maturity stage of the Cavendish banana on the rate of quality change of the fruit during storage. This research used bananas picked from PT Great Giant Pineapple in PG4 East Lampung with the number of plant leaves during cultivation conditioned on 2 weeks before harvest of 5 leaves. Sample banana fruit was harvested at 10 weeks after cutting the heart. The banana clones used were CJ50, CJ301, and CJ40. Banana samples used in the research were taken from several hand in a bunch, namely hand 2, 4, 6, and 8. Banana samples were stored in vacuum plastic packaging in a box at a temperature of 16°C for 49 days. The results show that the differences in the Cavendish banana clone affect significantly to the rate of ripening and fruit quality during storage. These are represented by the skin color, fruit temperature, hardness, total dissolved solids (TDS), water content and weight loss. The different levels of hand (on the 2nd, 4th, 6th, and 8th hand) as a representation of the level of fruit maturity also seem influence to the rate of maturity and fruit quality during storage. This is expressed by parameters of skin color, fruit temperature, weight loss, hardness, but not has a significant effect on total dissolved solids and water content.

Keywords: Cavendish banana, clone type, maturity level

ABSTRAK

PENGARUH JENIS KLON DAN TINGKAT KETUAAN TERHADAP LAJU PERUBAHAN MUTU BUAH PISANG CAVENDISH (*Musa acuminata cavendish*) SELAMA PENYIMPANAN

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Pisang (*Musa* sp.) merupakan komoditas buah tropis yang sangat diminati konsumen di banyak negara karena rasanya, gizinya, dan harganya relatif terjangkau. Salah satu jenis tanaman pisang yang dibudidayakan adalah pisang Cavendish (*Musa acuminata* C.). Tujuan dari penelitian ini adalah mengetahui pengaruh jenis klon buah pisang Cavendish terhadap laju kematangan dan mutu buah selama penyimpanan serta mengetahui pengaruh tingkat ketuaan buah pisang Cavendish terhadap laju kematangan dan mutu buah selama penyimpanan. Penelitian ini menggunakan buah pisang yang dipetik dari tanaman yang dibudidayakan oleh PT Great Giant Pineapple di PG4 Lampung Timur dengan jumlah daun tanaman saat budidaya yang dikondisikan pada 2 minggu sebelum panen sebanyak 5 batang. Buah pisang sampel dipanen pada umur 10 minggu setelah potong jantung. Jenis klon pisang yang dipakai yaitu buah pisang CJ50, CJ301, dan CJ40. Sampel buah pisang yang digunakan pada penelitian diambil dari beberapa sisir pada suatu tandan, yaitu sisir ke-: 2, 4, 6, dan 8. Sampel pisang disimpan dengan pengemasan plastik *vacuum* dalam box bersuhu 16 °C selama 49 hari. Hasil dari penelitian ini yaitu perbedaan jenis klon pisang Cavendish terhadap laju kematangan dan mutu buah selama penyimpanan berpengaruh nyata pada warna kulit, suhu buah, kekerasan, total padatan terlarut, kadar air, dan susut bobot. Perbedaan tingkatan sisir (pada sisir ke-2, 4, 6, dan 8) sebagai representasi tingkat ketuaan buah terhadap laju kematangan dan mutu buah selama penyimpanan menunjukkan hasil bahwa sisir berpengaruh nyata pada warna kulit, suhu buah, susut bobot, kekerasan, namun tidak berpengaruh nyata terhadap total padatan terlarut dan kadar air.

Kata kunci: pisang Cavendish, jenis klon, tingkat ketuaan